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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,040	03/11/2004	Victor J. Griswold	72255/33241	4961

  

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EXAMINER	
LAM, HENRY S	

  

ART UNIT	PAPER NUMBER
2616	

  

NOTIFICATION DATE	DELIVERY MODE
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/798,040	GRISWOLD, VICTOR J.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Henry Lam	2609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>31 May 2005</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Note: Claim 10, 13, 16 mention the phrase "adapted for". The phrase "adapted for" is not positively recited claim limitation. Therefore, the limitations following the phrase are not considered.
3. Claims 1-4, 8, 10-12, 17, 19-22, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by **Ho et al** (US 2002/0071449 A1).
4. For claims 1-4, 8, 10-12, 17, 19-22, and 26, **Ho** teaches a method for an access point to provide immediate delivery of low-latency multicast/broadcast data packets to at least one of a plurality of virtual local area networks (para 0003, lines 1-5), the steps comprising:  
  
monitoring, at the access point, all virtual local area networks comprising at least one

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station associated with the access point (para 0031, lines 1-9);

determining, on at least one of the plurality of virtual local area networks, all associated stations supporting low-latency data transmission (para 0008, lines 1-15);

identifying the at least one virtual local area network having all associated stations supporting low-latency data transmission (para 0014, lines 1-9); and

transmitting low-latency multicast/broadcast data packets immediately to the at least one virtual local area network having all associated stations supporting low-latency data transmission (para 0059, lines 1-10);

wherein the access point is an 802.11 access point (para 0033, lines 5&6);

wherein each station supporting low-latency data transmission is in 802.11 constantly active operation (para 109, lines 1-11);

further comprising the step of identifying at least one virtual local area network having at least one associated station supporting high-latency data packets (para 0030, lines 8-14);

wherein the associated station is a portable personal computer (para 0003, lines 1-5).

In a network comprising at least one access point, a plurality of virtual local area networks and a plurality of associated stations (para 0003, lines 1-5), a system for automatically optimizing delivery of low-latency multicast/broadcast data packets over at least one of the virtual local area networks (Ho para 0014, lines 1-9);

wherein the access point is an 802.11 access point (para 0033, lines 5&6);

wherein each low-latency associated station is in 802.11 constantly active operation (para 0109, lines 1-11);

wherein the associated station is a portable personal computer (para 0003, lines 1-5).

A computer program product having a computer readable medium having computer program logic recorded thereon for performing a computer implemented method for an access point to provide immediate delivery of low-latency data packets to at least one of a plurality of virtual local area networks (para 0003, lines 1-5), the steps comprising:

monitoring, at the access point, all virtual local area networks comprising at least one station associated with the access point (para 0031, lines 1-9);

determining, on at least one of the plurality of virtual local area networks, all associated stations supporting low-latency data transmission (para 0008, lines 1-15);

identifying the at least one virtual local area network having all associated stations supporting low-latency data transmission (para 0014, lines 1-9); and

transmitting low-latency multicast/broadcast data packets immediately to the at least one virtual local area network having all associated stations supporting low-latency data transmission (para 0059, lines 1-10);

wherein the access point is an 802.11 access point (para 0033, lines 5&6);

wherein each low-latency data transmission supporting station is in 802.11 constantly active operation (para 0109, lines 1-11).

further comprising the step of identifying at least one virtual local area network having at least one associated station supporting high-latency data packets (para 0030, lines 8-14)

wherein the associated station is a portable personal computer (para 0003, lines 1-5).

*Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1,148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 5-7, 9, 14, 15, 18, 23-25, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ho et al** (US 2002/0071449 A1) in view of **Wotherspoon et al** (US 2003/0193930 A1).

7. For claims 5-7, 9, 14, 15, 18, 23-25, and 27, **Ho** discloses the entire claimed invention, as recited in paragraph 4 of this office action, except for wherein each high-latency associated station is in 802.11 power-save protocol operation as recited in claim 5; further comprising the step of buffering the multicast/broadcast data packets for the at least one virtual local area network having the at least one associated station in power-save protocol operation as recited in claim 6; further comprising the step of transmitting the buffered multicast/broadcast data packets with a data traffic indicator mark as recited in claim 7; wherein the associated station is a personal data assistant as recited in claim 9; wherein each high-latency associated station is in 802.11 power-save protocol operation as recited in claim 14; further comprising means adapted for buffering the multicast/broadcast data packets for the at least one virtual local area network having the at least one associated station in power-save protocol operation as recited in claim 15; wherein the associated station is a personal data assistant as recited in claim 18; wherein each high-latency associated station is in 802.11 power-save protocol operation as recited in claim 23; further comprising the step of buffering the multicast/broadcast data packets for the at least one virtual local area network 10 having the at least one associated station in power-save protocol operation as recited in claim 24; further comprising the step of transmitting the buffered multicast/broadcast data packets with a data traffic indicator mark as recited in claim 25; wherein the associated station is a personal data assistant as recited in claim 27. **Wotherspoon** from the same or similar field of endeavor, teaches the use of 802.11 power-save protocol operation (para 30, lines 15-20); buffering the

multicast/broadcast data packets (para 0025, lines 1-13); personal data assistant (para 0012, lines 13-16). Thus, it would have been obvious to someone of ordinary skill the art to combine the Voice Over IP Portable Transreceive of **Wotherspoon** with the Unified Channel Access For Supporting Quality Of Service (QOS) In A Local Area Network of **Ho** at the time of the invention. The power-save protocol, buffering the multicast/broadcast data packets, personal data assistant as taught by **Wotherspoon** can be added to the QOS networking in of **Ho**. The motivation to combine the power-save protocol, buffering the multicast/broadcast data packets, personal data assistant of **Wotherspoon** with the Unified Channel Access For Supporting Quality Of Service (QOS) In A Local Area Network of **Ho** is that it provides the high quality of service, dynamic handling priority data communication, low latency transmit and optimizing the 802.11 power-save in data communication networking.

### *Conclusion*

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Cheng et al** (US 2002/0140094 A1) and **Rudnic et al** (US 2002/0159418 A1) are all cited to show systems which are considered pertinent to the claimed invention.



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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry Lam whose telephone number is (571) 270-3122. The examiner can normally be reached on Monday through Thursday 8:00AM to 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dang Ton can be reached on (571) 272-3171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HL



DANG T. TON  
SUPERVISORY PATENT EXAMINER